

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)
)
Interconnection Between Local) CC Docket No. 95-185
Exchange Carriers and Commercial)
Mobile Radio Service Providers)

DOCKET FILE COPY ORIGINAL

COMMENTS OF SPRINT CORPORATION

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March 4, 1996

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SUMMARY

Sprint urges the Commission to:

- confine this proceeding to interim arrangements between PCS providers and LECs;
- prescribe interim interconnection between such carriers on a bill and keep basis, except for the interconnection facility itself, the costs of which should be shared equally;
- restrict the bill and keep arrangement to traffic originating in each party's serving area;
- utilize its authority under §332 of the Act to regulate PCS-LEC interconnection; and
- leave arrangements between PCS providers and IXC's for long distance traffic to mutual agreement.

The most pressing need in this docket is to have interim interconnection arrangements in place for the start-up of the PCS industry. To attempt to prescribe arrangements for other CMRS providers, such as cellular carriers, could raise questions under the Sierra-Mobile doctrine and would necessitate development of a much larger evidentiary record that could preclude prompt action on PCS-LEC interconnection.

It is also premature to develop a record on long-term CMRS-LEC interconnection arrangements. Since PCS is not yet in operation, except in the Baltimore-Washington area, no record can be developed on PCS providers' costs. Furthermore,

PCS entry might alter the cost structure and traffic characteristics of cellular service as well. Thus, consideration of long-term CMRS-LEC interconnection should await completion of the Commission's promised access reform proceeding and reasonably widespread introduction of PCS service.

For this interim period, bill and keep should be prescribed for PCS-LEC interconnection. It is simple to administer, obviates the need to determine appropriate costing methodologies (and to guess what PCS costs will be) and, considering that the PCS industry will be in a start-up mode during this period, will be fair and reasonable for PCS providers and LECs alike. Bill and keep should cover all intra-network transmission of each carrier, and the cost of the interface facility between the carriers should be shared equally. Sprint urges the Commission to exercise its jurisdiction under §332 to prescribe PCS-LEC interconnection terms. Nothing in the Telecommunications Act of 1996 alters the Commission's power to do so.

Finally, inasmuch as cellular-IXC interconnection terms have been left to mutual agreement without claims of serious prejudice by either group of carriers, it would be appropriate to leave PCS-IXC interconnection to mutual agreement as well.

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COMMENTS OF SPRINT CORPORATION

Sprint Corporation hereby submits its comments in response to the Notice of Proposed Rulemaking (FCC 95-505) released January 11, 1996 in the above-captioned docket. In Sprint's view, the Commission should:

- confine this proceeding to interim arrangements between PCS providers and LECs;
- prescribe interim interconnection between such carriers on a bill and keep basis, except for the interconnection facility itself, the costs of which should be shared equally;
- restrict the bill and keep arrangement to traffic originating in each party's serving area;
- utilize its authority under §332 of the Act to regulate PCS-LEC interconnection; and
- leave arrangements between PCS providers and IXC's for long distance traffic to mutual agreement.

**I. SPRINT'S GENERAL COMMENTS: THE COMMISSION SHOULD
LIMIT THIS DOCKET TO INTERIM PCS-LEC ARRANGEMENTS**

In Sprint's view, the sole purpose of this proceeding should be to establish interim transitional interconnection arrangements between LECs and PCS providers. PCS licensees have spent (and are proposing to spend in the on-going C-block auction) billions of dollars for the right to bring PCS services to market. Only one licensee -- Sprint's affiliate American Personal Communications, L.P. ("APC") -- is operating today, but other licensees will commence operations in the coming months. If the full potential of PCS services is to be realized, it is imperative that this industry be afforded, at the outset, interconnection terms with local carriers that are fair to the interests of both parties and conducive to attainment of the Commission's vision for PCS.

Sprint recognizes that limiting this proceeding to PCS-LEC arrangements will, if Sprint's substantive proposals are adopted, create a disparity between those arrangements and the interconnection terms now in effect for cellular-LEC interconnection.¹ However, to the extent that cellular-LEC

¹ A description of the current tariffed arrangements between cellular carriers and the Sprint LECs is provided in Appendix A. As the appendix indicates, many arrangements are governed by contracts, and the contracts may be subject to non-disclosure provisions. However, it is fair to say that the contracts are usually based on access rates and involve payments only by cellular carriers to the LECs.

arrangements are subject to intercarrier contracts, the Commission must make a strong showing under the Sierra-Mobile doctrine² to abrogate existing contracts. As discussed above, Sprint believes time is of the essence in putting in place interconnection arrangements at the outset of PCS service. The additional time required to compile the record necessary to support an abrogation of existing cellular-LEC arrangements could preclude resolution of PCS-LEC interconnection issues before PCS licensees enter the marketplace on a widespread basis.

In addition, PCS services may prove to have quite different characteristics than those of cellular services. Cellular service is a duopoly. One-half of the licenses were initially awarded to LECs (free of charge), and many LECs have subsequently acquired significant interests in the non-wireline cellular licensees as well. Thus, the cellular industry is, to a large extent, dominated by the incumbent LECs, who have positioned it in a high-end market niche. The ownership of PCS licenses will be more widely dispersed, and there will be more PCS licensees in each market than cellular carriers. PCS licensees may well bring entirely different services and pricing philosophies to the marketplace. For example, although it is customary for cellular carriers to

² See FPC v. Sierra Pacific Power Co., 360 U.S. 348, 353-55 (1956); and United Gas Co. v. Mobile Gas Corp., 350 U.S. 332, 344 (1956).

impose airtime charges for all calls received by cellular customers, Sprint's PCS affiliate in the Baltimore-Washington market, APC, imposes no airtime charges for the first minute of an incoming call. Data from APC's initial operations, Sprint understands, show a much closer directional balance for interconnected traffic than the 90:10 flow into LEC networks that is typical of cellular carriers. While these data admittedly relate to the early operations of a single PCS licensee in only one market, they show that there is at least a possibility that PCS will vary substantially from the traffic characteristics of cellular service.

Although the Commission (in ¶76) sought comments on long-term CMRS-LEC interconnection, Sprint believes it is premature to develop a record in this docket on what the long term arrangements ought to be. First, the PCS industry -- which will be a large segment of the total CMRS industry -- has not yet begun large scale operations. If the Commission bases long-term arrangements on something other than bill and keep, it must look to the costs and traffic characteristics of the PCS providers, as well as the LECs, to determine what is fair. Any record developed before PCS systems are operational on a widespread basis would be based on speculation rather than fact. Furthermore, if PCS providers take a different approach to the market than cellular carriers have taken thus far, the cellular industry may have to adapt and respond. This could

change both the cost structure and the traffic characteristics of cellular service, and hence the appropriate interconnection arrangements between cellular carriers and LECs. In short, until PCS is up and running, it is impossible to develop a record on appropriate long-term CMRS-LEC interconnection arrangements.

In addition, Sprint agrees with the Commission's suggestion (e.g., in ¶17 of the Notice) that there may be close interrelationships in the long run between appropriate interconnection arrangements and access charges. However, it is widely recognized that access charges today are well above economic costs, and it makes no policy sense to saddle the infant PCS industry with the burdens long distance carriers now bear.

Although there are obvious similarities between CMRS-LEC and LEC-to-LEC interconnection, on the one hand, and access charges on the other, there are also substantial differences. CMRS-LEC and LEC-to-LEC interconnection involve interconnection between contiguous or overlapping networks each of which serves its own customers in a confined geographic area. By contrast, the access paradigm involves interconnection of unequal networks -- one local and one of the transcontinental and international scope -- and

overlapping carrier-customer relationships.³ Because of these differences, it is not clear how and whether the economic arrangements for these various forms of interconnection should be rationalized. It is clear, however, that until the Commission's promised access reform efforts have been completed, there is little point in attempting such a rationalization. By the time the Commission's forthcoming access reform proceeding has been completed, the PCS industry will have begun operations on a much larger scale. It would then be timely to compile a record on CMRS-LEC interconnection arrangements and, if appropriate, rationalize those arrangements with the reformed access charges.

³ The end user is customer both of the local carrier and the long distance carrier. The consumer uses the local carrier's facilities to place a long distance call but is the long distance carrier's customer for such a call. Thus, the long distance carrier must buy access from LECs at each end of the call to offer its services.

II. SPRINT'S PROPOSED COMPENSATION FOR INTERCONNECTED TRAFFIC

A. Bill and Keep Is The Appropriate Interim Arrangement for PCS-LEC Interconnection

Sprint supports the use of bill and keep arrangements for PCS-LEC interconnection during the interim period until access reform has been completed and PCS networks are up and running on a reasonably widespread basis. For these interim purposes, bill and keep has a number of advantages, as recognized by the Commission (see e.g., ¶¶61-62). Bill and keep is simple to administer; it obviates the need for separate or new billing and accounting systems; and it prevents incumbent LECs from charging excessive interconnection rates, which can skew the positioning of PCS in the market.

Attempting to determine appropriate interconnection charges for interim purposes is a practical impossibility. On the LEC side, existing interstate access charges are widely acknowledged to be far above economic costs, yet coming up with another basis for charging for traffic received by LECs involves a host of issues -- incremental versus fully distributed costing, peak versus off-peak pricing, how the peak period should be measured, etc. -- that clearly are incapable of resolution in the immediate future. Determining the charges PCS providers should receive for traffic they terminate involves these same methodological issues,

complicated by the fact that the cost characteristics of the PCS industry, however measured, cannot be known until the industry is operating on a reasonably wide scale.

Bill and keep obviates the need to engage in the hopeless task of resolving these issues in a factual vacuum. It allows PCS-LEC interconnection to commence while providing at least rough justice to both the LEC and the PCS provider: each carrier incurs some cost in terminating a call received from the other, but each carrier receives the value of enabling its customers to terminate calls on the other carrier's network.

In addition, APC's early experience suggests that PCS-LEC traffic may be fairly evenly balanced. Even if that proves not to be the case, the PCS industry will be largely in a start-up posture during the interim period. Thus, the total volume of traffic exchanged between PCS providers and LECs is likely to be so small in comparison with the LEC's total traffic that the LEC's network resources will not be unduly burdened by having to handle any imbalance of traffic.

Furthermore, even if PCS-LEC traffic is imbalanced, costs may be imbalanced too. If the rates for cellular service are any indication of PCS costs, those costs will be far greater than the costs of wireline local service. Thus, the fact that a PCS carrier terminates a far smaller volume of interconnected traffic than the LEC may be offset by the much

higher unit costs the PCS carrier incurs for terminating traffic.

It is by no means clear that PCS could ever serve as a complete substitute for, or be considered a direct competitor of, wireline local service. However, bill and keep is one arrangement for LEC-to-LEC interconnection,⁴ and its use for PCS would facilitate a test of the extent to which PCS can serve as at least a partial source of competition for wireline service.

In the Notice, the Commission proposed to limit the use of bill and keep essentially to the end-office switching and the local loop. It proposed to allow LECs to assess existing interstate dedicated transport rates for transmission facilities between the CMRS network and the LEC networks and sought comment on whether tandem-switched transport charges should be applied to CMRS providers in cases in which such LEC-provided facilities are used. Sprint takes issue with this limitation on the scope of bill and keep. Instead, bill and keep should apply to the entirety of each carrier's intra-network transmission, and the cost of the interface facility

⁴ Settlement arrangements for the termination of local traffic between incumbent LECs have taken many forms over the years. They range from splitting the cost on an equal basis, to the LEC recovering its own cost from its customers, to charging for the leasing of circuit capacity needed to terminate traffic. These differing arrangements have been created as a result of regulation, legislation, and sometimes just the simple fact that contracts have been in place for over 20 years.

between the two carriers should be shared equally by those carriers.

With the relatively small volumes of traffic that can be expected during the interim period, Sprint would anticipate that efficient traffic engineering considerations would lead the LEC to funnel traffic from its individual end offices through a tandem switch to avoid costly and underutilized facilities between each end office switch and the PCS tandem or MTSO. Likewise, the PCS provider would find it more convenient to deliver traffic to a LEC at a single point of interface in a local calling area than to route it to multiple LEC end offices. If this is the case, then it makes sense to allow each carrier to bear its own costs of transmitting interconnected traffic to and from the point of interconnection. Such a scheme would give each carrier an incentive to route the traffic as efficiently as possible so as to minimize its own costs, and neither carrier would have to bear the costs of the other carrier's inefficient internal routing of traffic.

In proposing to require CMRS providers to pay transport charges to the LECs, possibly including tandem switched transport for connections from the tandem switch to individual end offices, the NPRM seems to assume that a PCS provider's MTSO is "like" a LEC end-office switch, and that the entire transmission path between the MTSO and the wireless phone is

simply the wireless equivalent of a wireline loop. However, wireless and wireline technologies are simply different, and it is not self-evident which piece-parts of the two are equivalent to each other. Wireless MTSOs will serve a much larger geographic area than a typical LEC end-office switch. Thus, even in a market where there is a single MTSO, the MTSO will perform the same functions for a wireless call traversing a substantial distance that, in a LEC's network, would require at least two switches (one at each end of the call) and possibly three (if the LEC's interoffice transport is routed through a tandem switch). Likewise, in a wireless network, the base station controller, which subtends the MTSO, functions like a LEC end office: it handles all calls to and from the mobile phones within range of the base stations controlled by the base station controller. Thus, the lines connecting the base station controllers to the MTSO can be viewed as similar to the LECs' interoffice transport network rather than the LECs' local loops. Like the LECs' transport facilities, the link between the MTSO and the base station is traffic sensitive, i.e., it is not dedicated to the use of a specific wireline customer. Thus, notwithstanding the different architectures of these networks, if it were deemed to be appropriate to require PCS providers to pay LEC "transport" costs to the LEC end-office, it may well be equally valid to require LECs to pay PCS "transport" costs

from the PCS carrier's MTSO to the base station controllers, and also to pay a portion of the cost of the MTSO itself.

Rather than attempting to resolve which piece-parts of a PCS network mirror the transport portions of the LECs' networks, and to then confront the difficult task of measuring costs (particularly for the un-built PCS networks), the same reasons the Commission gave for requiring bill and keep for the end-office switching and loop portions of the network apply with equal force to intra-network transmission functions.

The only exception to bill and keep, in Sprint's view, should be the facility between the interconnecting networks. This facility has to be provided by someone, and no party should receive the benefit of this facility free of charge. Thus, Sprint proposes that the cost of this facility be shared equally by the interconnecting parties. Because the factual situation may vary in different markets, Sprint does not see the need for a detailed prescription of such arrangements. However, the Commission should enunciate general guidelines to cover the interconnection facility, and allow the PCS provider and the LEC to determine how best to apply these principles to each concrete situation.

The two fundamental principles that should apply to the interconnection facility are: (1) the cost of the interconnecting facilities should be shared equally,

reflecting the two-way nature of the interconnection; and (2) the most economical facility available should be used. In cases where this facility requires new construction, the construction should be done by the party offering the lowest cost for the construction, with the other party reimbursing it for half of its costs.⁵ If there are existing facilities available to accommodate the interconnection, the cost of those facilities should be divided equally using appropriate tariffed rates. Thus, for example, if the LEC can use a DS3 entrance facility to join the two systems, the LEC would recover half of its DS3 entrance facility rate from the PCS provider, and absorb the other half itself. If there are alternative facilities available at a lower cost than the LEC's facility, the lower cost facilities should be used instead, unless the PCS carrier agrees to use the LEC's facilities.⁶

The Commission should recognize that imposition of a bill and keep arrangement could raise the possibility that a long distance carrier would attempt to feed long distance traffic to a PCS provider in order to circumvent paying access charges

⁵ Where construction is required by both parties (e.g., to an agreed upon meet point), each party should recover half of its construction costs from the other party, to account for situations in which the construction burdens may be unequal (e.g., a case where the meet point is closer to one carrier's facilities than the other's).

⁶ However, in that case, it would be appropriate for the LEC to charge only half of the lower-cost service provider's rate.

to the LEC on the terminating end of the call. Sprint views such an arrangement as an abuse of the bill and keep arrangement and as inconsistent with the rationale for prescribing that arrangement for this interim period. Accordingly, the Commission should make clear that the bill and keep arrangement applies only to traffic originating within the PCS provider's serving area and terminating in the LEC's local exchange network, and vice-versa.

B. Jurisdiction

Sprint supports the Commission's tentative conclusion that it has sufficient authority under Section 332 to control CMRS-LEC interconnection, and Sprint urges the Commission to exercise that authority, at least for the interim interconnection arrangements between PCS providers and LECs. Adopting the "informal" model (see ¶108 of the Notice) of adopting guidelines that would then be implemented by state regulatory authorities could lead to conflicting interpretations and requirements on PCS providers and LECs, and could increase the cost of all parties by having to resolve issues in 50 different forums, rather than in a single forum. Furthermore, it will be difficult to determine the jurisdictional nature of many PCS-LEC calls. Certain PCS licensees will have a serving area -- an MTA -- that can encompass more than one state, and even though a PCS phone will have a particular area code, it may originate a call in

another state in that serving area. It would be costly and inefficient to require LECs and PCS providers to determine the exact jurisdictional nature of each PCS-LEC call, and there is little reason, in Sprint's judgment, to allow differing interconnection regimes for intrastate and interstate calls, when the FCC has jurisdiction to prescribe such arrangements for all calls. Nothing in the Telecommunications Act of 1996 modified the preexisting provisions of the Act that gave the Commission jurisdiction over such interconnection. Therefore the enactment of this legislation has no impact on the tentative conclusions set forth in the NPRM.

III. SPRINT'S VIEWS ON IXC-CMRS INTERCONNECTION

In ¶¶115-117, the Commission tentatively concluded that IXCs should pay access charges to CMRS providers for calls originated or terminated by those carriers, and sought comment on how those charges should be set. To date, compensation arrangements between IXCs and cellular carriers have been left to agreement between the parties without, to Sprint's knowledge, any belief that either side has been seriously prejudiced by the existing arrangements. Given the competitive nature of the long distance market and Sprint's view that the focus of this proceeding should be on interim arrangements for PCS, Sprint proposes that for the interim period, PCS-IXC arrangements likewise be left to mutual agreement of the parties.

IV. CONCLUSION

For the reasons explained above, Sprint urges the Commission to prescribe, for an interim period (i.e., until completion of an access reform proceeding and consideration of the relationship between the conclusions in that proceeding and other forms of interconnection), a bill and keep method for interconnection between PCS providers and LECs, applicable to all functions performed by each carrier behind the point of interface, and to require the cost of the interconnecting facility to be shared equally. This arrangement should apply only to traffic originated within the serving areas of the PCS licensee and the LEC. The Commission has jurisdiction -- and should exercise it -- to mandate these arrangements nationwide. Interconnection arrangements between PCS providers and IXCs should continue to remain subject to mutual agreement of the parties.

Respectfully submitted,

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SPRINT LEC CELLULAR INTERCONNECTION MATRIX
Appendix A

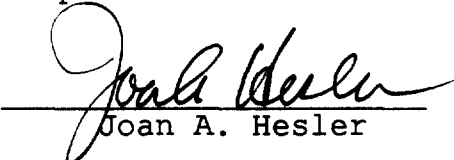
State and Company	Cellular Interconnection Tariff or Contract	Method of Cellular Interconnection Compensation
Florida - Centel	Tariff	FPSC generically determined this methodology which applies to landline terminating only. Local and toll traffic are combined with a composite rate applied to all minutes. A local rate includes traffic sensitive intrastate access elements and a toll rate includes all intrastate access charges. The composite rate = 80% local and 20% toll weightings; \$.0334/MOU non-discount and \$.0234/MOU discount.
Florida - United	Tariff	Same as Centel Florida
Illinois - Centel	Contract	
Indiana - United	Contract	
Kansas - United	Contract	
Minnesota - United	Contract	
Missouri - United	Contract	
Nebraska - United	Contract	
Nevada - Centel	Tariff	Mirror interstate switched access rates; included in 1995 rate case filing to be effective February 1996 if approved. Rates apply to landline terminating only at \$0.007144 per MOU plus a per mile charge.
New Jersey - United	Contract	
North Carolina - Centel	Contract	
North Carolina - United	Contract	
Ohio - United	Contract	
Oregon - United	Contract	
Pennsylvania - United	Contract	
South Carolina - United	Tariff	A single per MOU tariffed rate, \$.039, applies to all EAS, local and intraLATA toll traffic for Type I and II interconnection terminating to landlines.
Tennessee - United	Tariff	A usage rate of \$.03686/MOU is applied to terminating landline traffic within the local/EAS area. IntraLATA toll rates apply to calls outside the local/EAS area.
Texas - Centel	Contract	
Texas - United	Contract	

SPRINT LEC CELLULAR INTERCONNECTION MATRIX**Appendix A**

State and Company	Cellular Interconnection Tariff or Contract	Method of Cellular Interconnection Compensation
Virginia - Centel	Contract	
Virginia - United	Contract	
Washington - United	Contract	
Wyoming - United	Contract	

CERTIFICATE OF SERVICE

I, Joan A. Hesler, hereby certify that on this 4th day of March, 1996, a true copy of the foregoing COMMENTS OF SPRINT CORPORATION, was mailed via First-Class Mail, Postage Prepaid or hand delivered to the below-listed parties:


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